



John Reich Journal

Volume 8 / Issue 3

April 1994

JRCS

JOHN REICH COLLECTORS SOCIETY
P.O. Box 135 Harrison, OH 45030

The purpose of the John Reich Collectors Society (JRCS) is to encourage the study of numismatics, particularly United States gold and silver coins minted before the introduction of the Seated Liberty design, and to provide technical and educational information concerning such coins.

Annual dues \$15.00

For general membership information write to:

**Office of the President, David J. Davis
P.O. Box 205, Ypsilanti, MI 48197**

The **John Reich Journal** is the official publication of the Society and is distributed to all members in good standing. Members are encouraged to submit any articles encouraging the study of numismatics and / or relating to early United States gold and silver coins to the editors. Especially needed are articles containing new information about die varieties, die states of published die varieties, attribution methods, collections, collectors, etc. Inquiries about specific varieties will be directed to one of the experts in that series. All correspondence should be directed to:

Co-Editors

Bradley S. Karoleff, NLG

Keith G. Bellman, NLG

P.O. Box 135

Harrison, OH 45030

1993 / 1994 Officers

President	David J. Davis
Vice President	John W. McCloskey
Vice President	Bradley S. Karoleff
Secretary	Keith G. Bellman
Treasurer	Russell J. Logan
Program Chairman	D. Mark Smith
West Coast Representative	James Matthews

Cover Photos: No, the printers did not reverse the negatives! On the front cover is a brockage of an 1825 dime (Obverse 2) and on the back cover is a brockage of an 1827 dime (Reverse 1).

[ex Lovejoy:69]

Photos courtesy of Tom Mulvaney.

John Reich Journal

Official publication of the

John Reich Collectors Society

Volume 8 / Issue 3

April 1994

Whole No. 24

Contents

Editors' Comments	2
Plaudits, Pans and Perplexing Points	4
Obverse Die Dentil Analysis, Part 2 - Capped Bust Halves, 1820 to 1836 by David Finkelstein	6
Safety Factor in Grading Under Halogen Lamps? by Edgar E. Souders	19
Revision of Rarity Ratings for Bust Half Dollars by Glenn R. Peterson, M.D. ...	20
Capped Bust Eagles: A New Approach to Die Variety Nomenclature by David Kenny	22
Another Bust Half Dollar Remarriage by Bradley S. Karoleff, NLG	27
Center Dots? by Dick Kurtz	31
A Lucky Day in Long Beach by Ed Price	32
Attributing the Smithsonian Collection by Glenn R. Peterson, M.D.	34
Is It Reach As In Peach . . . Or Is It Rike As In Pike? by George Hamilton	38
Bust Quarters - 1796 - 1838 by Jules Reiver	39
New Variety of Reeded Half - 1838 JR22 by Jules Reiver	Inside Back Cover

Editors' Comments

By the time you are reading this it will be springtime and the ANA will be fast approaching. We will be planning the open houses for JRCS members in our hotel rooms during the show. Please ask around the floor to find out the times and room numbers for the meetings. This is the best opportunity to meet each other and exchange information about our favorite series of coins. There will be an assortment of authors, researchers and numismatic personalities available to meet and talk with in an informal setting. We always enjoy these meetings the most, and look forward to them each year.

We have received some interesting, and informative, articles from the membership since our request for more submissions in the last Journal. We would like to thank all the authors for their efforts and would like to see more material ranging from a short letter or question to a full length research paper. We always look forward to hearing from the membership. We have a number of articles on hand for the next journal, but would like to have even a little more cushion. So, fill the P.O. Box with interesting items for future publication in the **JR Journal**.

We were speaking to a member of the club the other day about the **JR Journal** and he brought up some interesting comments that we would like to share with the rest of you. He commented that the passion shown by the writers of the articles for the **JRJ**, in his opinion, surpassed those appearing in the other journals that he reads. The passion for the coins, and the hobby, is clearly evident without the continuing sniping and personal attacks evident in some other publications. He enjoyed the fact that personal agendas were not evident and that the grading controversy was not an ongoing issue. We, the editors, have tried to keep the personal conflicts to a minimum and have also tried to keep peoples' personal agendas out of the pages of our journal. We hope that this can continue into the future. We must say that, so far, this has been quite easy as the members have not tried to use the **JRJ** for their own gains. Our hope is that the **JR Journal** will be viewed as a scholarly endeavor that serves its membership to the best of its abilities. We welcome your comments and input to help keep the John Reich Collectors Society one of the leading numismatic organizations in the United States.

We would also like for each of you to take a few minutes at your next local coin club meeting to try and recruit a few new members for the JRCS. Please ask if there is anyone interested in joining our ranks. Feel free to copy the membership

application that was mailed with the last **JRJ** or let us know if you need more. We can only grow with the support and enthusiasm of each of our members. Give someone else the chance to enjoy the hobby through the JRCS as you have.

In the latest journal, Volume 8, Issue 2 (January, 1994), we had erroneously misspelled an author's name. The article on page 40 entitled *Eureka! That Last Elusive Overton* was written by Darrel Neidigh. We apologize to Darrel for the misspelling and also thank those who contacted us with the correction so that we could rectify this oversight. Thirty lashes with a floppy disk for the editors.

In the Editors' Notes section of the last journal, we mentioned electronic mail (using a computer) as an alternate way in which members could communicate with us or send articles. Shortly after we had sent the journal to the printer, we received a letter from Bijan Anvar who had written for the journal a couple of times. He is a section leader for **CompuServe**'s Coin and Currency section which probably has the largest public library of coin graphics. There are many notables on-line with whom you can talk. Bijan has offered to hold monthly 'electronic JRCS meetings' if there is enough interest. They already hold other weekly club meetings, as well as monthly EAC meetings. He is open to any ideas that members might have to improve the communication, education and fun within our hobby. If you are already on **CompuServe** you can join the Coin and Currency forum or send a mail message to Bijan's **CompuServe** e-mail address: 73310,3303.

We still have some back issues of our club publication available for sale. Sales have been brisk the last few months and we are running short on some of the issues. You can order missing Journals for your library for \$4.50 each postpaid. If you have a complete set and are interested in the custom leather binding it is still available for Volumes 1-5 for \$100.00 including insured return mail. Please contact the editors for more information.

We hope you are all enjoying your collections and your membership in the JRCS. Remember to write should you have any questions, suggestions, comments, or even complaints. We look forward to hearing from you and meeting anyone who makes the trip to Detroit. Remember that JRCS is compiling the census for Bust Dollars, send your inventory listing today to be included in the next issue.

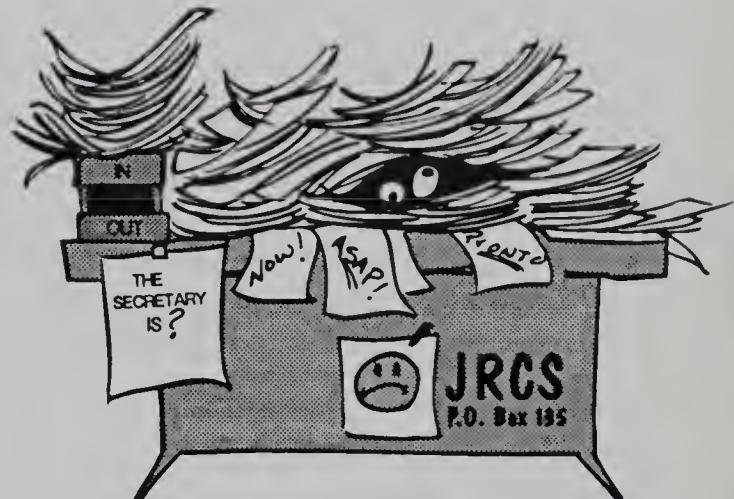
Bradley S. Karoleff / Keith G. Bellman

Plaudits, Pans and Perplexing Points



I would like to see a survey of Early Half Dimes 1794 - 1805 published in the **JR Journal**.

This series has not yet appeared, presumably due to the meager submissions. Even if only a few collections approaching completeness are reported, the raw totals compiled in each grade for each variety would be instructive.



Mark Verbeck

*[ed. - We might be able to include this with the Bust Half Dime census that is scheduled for early next year if there is enough interest and response. It would be similar in nature to the dime census that was published in Volume 6, Issue 3 (July, 1992). More to follow in later issues of the **JRJ**.]*



I have received my complete set of back issues of the John Reich Journal, and have perused them with great satisfaction. Although I began my coin collecting endeavors in 1955, the year of the famous double die, I was never exposed to the depth of professionalism and scholarship evident in the JRCS' production. The reason I came to join the society was my interest in the engraving work of Robert Scot and John Gardner, especially in relation to the eagle dies. In preparation for the writing of my own article, I began to analyze other articles.

In particular, the article *An Estimate of 'The Survivors'* by Philip J. Evans in Volume 7, Issue 3 (April, 1993) caught my attention on two counts. First, the arithmetic is off $(336,095 / 82,340,324) * 100$ equals 0.408% and not 0.00408% as seen on page 27. The result is that all Mr. Evans' % numbers on the following three charts are off by a factor of 100. This must have been a typo. Also confusing is the inclusion of the 1,200 1836 Reeded Edge Capped Bust Halves but not the 3,629,820 minted in 1837 of the same type. What about those 1836-1839 halves anyway; is it the lettered edge that's so wonderful? Didn't Reich design the obverse of the Reeded Edge Halves too?

At any rate, I am in full agreement with Harry Salyards letter in Volume 8, Issue 1 (October, 1993), wherein he postulates, based on Breen and common experience, that a survival rate would be far greater than all other issues of the early 19th century, possibly resulting in as many as 11+ million Bust Half Dollars remaining intact. I myself, who have never aspired to collect more than one or two Bust types had the opportunity, in 1980, to purchase 208 of these coins in one lot at a local auction. Alas, they had been dispersed well before I knew what a 'VARIETY' was, or I might today be a Bust Half Nut instead of an 'Eagle-Maniac.'

Considering that 132,592 eagles were minted between 1795 and 1804 with a possible survival rate of 3%, or roughly 4000 coins, and that the Bust Halves had to at least have equaled that survival rate, yielding about 2.5 million coins, we would expect to see 625 halves for every eagle. At the Baltimore ANA show I saw roughly 28 Capped Bust Eagles. Using this ratio, one would project that there were 17,500 Capped Bust Halves at the show. Admittedly, I missed seeing Mr. Winter's 1798/7 6x7 stars which was later sold at Bowers and Merena, and I could have missed one or two more. But, given the thousand plus dealers at the show, one could well believe there were 17 bust halves apiece, on average, per dealer.

Yet, we know the eagles were purposely melted for gold and also recoined in large amounts after the Act of 1834. So postulating a survival rate of 4 or 5 times greater than the eagle survival rate would indicate a possible population of 10 to 12.5 million Bust Halves. This is slightly higher than Mr. Evans' 336,095.

Perhaps in the not too distant future, in the age of the information superhighway, we can all punch in numbers on our keyboards at the same time, and somewhere in Iola, Wisconsin. The actual number of coins of one type or another will miraculously appear. I know there are those who would welcome such exact quantification of our hobby, but when that day of exactitude comes, and the mystique and romance fade away, I, for one, will mourn the loss of a bygone era.

Keep up the good work.

David Kenny

(PPP continues on page 30)

Obverse Die Dentil Analysis, Part 2 - Capped Bust Halves, 1820 to 1836

David Finkelstein

Introduction

This is the second of a two part date/variety/die dentil analysis for the obverses of Capped Bust Half Dollars. My study uses the information provided both directly and indirectly from four external sources, without which this study could not have been possible. They are:

1. **Early Half Dollar Die Varieties, 1794-1836**, Third Edition, Al C. Overton, Editor Don Parsley, 1990
2. **Early Half Dollar Die Varieties, 1794-1836**, Revised Edition, Al C. Overton, 1970
3. *Edges and Die Sequences on Early Half Dollars*, Ivan Leaman and Donald Gunnet, **America's Silver Coinage, 1794-1891**, Coinage of the Americas Conference, American Numismatic Society, New York, NY 1987
4. *The Crushed Lettered Edge Bust Half Dollars of 1833-1836*, Russell J. Logan, **John Reich Journal**, Volume 5, Issue 3 (December, 1990)

I would also like to thank Brad Karoleff, Ivan Leaman, Russell Logan and Edgar Souders for their valuable input.

Obverse dentil counts

There are 328 known Capped Bust die varieties dated 1820 to 1836. Of these, 12 overdates were made from 8 different obverse dies.

Table 1 is arranged by Overton variety and shows the number of dentils on the obverses of all known Capped Bust Halves dated from 1820 to 1836. Some values are followed by a ?, *, C, L, or S:

- ? preceded by a value indicates that most of the dentils were present on the coin(s) used to count the dentils, and the number of dentils is either correct or off by 1. A “?” with no value indicates that there were insufficient dentils to count. I would appreciate reader feedback for those die marriages with a “?”.
- * indicates that the die marriage is an overdate.
- C indicates that the die marriage is a Crushed Lettered Edge (CLE).
- L indicates that the die marriage is an 1834 large date.
- S indicates that the die marriage is an 1834 small date.

Table 1 also specifies the star 7 to headband relationships for each year. Whereas “L” indicates that star 7 points somewhere on the lower curl for some of the die marriages, “U”, “H”, and “F” indicate that star 7 points somewhere on the upper curl, headband, and front of cap respectively.

Table 2 is arranged by obverse die number as identified by Overton, and shows the number of dentils for the known Capped Bust obverse dies dated from 1820 to 1836. Note that 1827 Obverse 17 (O124) and 1827 Obverse 22 (O135) are both included in the table, even though they are the same obverse die. Refer to the **Supplement To Early Half Dollar Die Varieties**, by The Bust Half Nut Club, 1987, or **Early Half Dollar Die Varieties 1794-1836**, Third Edition, page 659.

Table 1 - Obverse Die Dentil Counts By Overton Variety

VAR	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829
ST7	LUHF	UHF	UHF	UHF	HF	UH	UH	UH	UH	UH
101	110*	110	109*	109	110*	109	110	110*	110	110*
102	110*	110	110*	109	110*	110	108	110*	110	110*
103	110	110	110	109	110*	110	108	110*	110	110
104	110	110	109	109	110	110	110		110	110
105	110	110	108	109	?	110	110	For	110	110
106	110	110	108	108	110	?	110	1827	110	110
107	110	110	110	109	109	109	110	Info	110	110
108	109		108	108	109	110	110		110	110
109			109	108	110	110	110	See	110	110
110			109	109	110	110	110	Note	110	110
111			109	109	109	110	110	Below	110	110
112			107	107	109	110	110		110	110
113			107	110	110	110	110		110	110
114			108		110	110	110		110	110
115			110		107	110	110		110	110
116					108	110	110		110	110
117					109	110	110		110	110
118						110	110?		110	110
119							110		110	110
120							110		110	110
121									110	
122									110	
123										110

Note

The 1827 obverses for O101 - O103 are overdates and have 110 dentils.

All other 1827 obverses have 110 dentils except for the following:

O117 ?

O141 110?

Table 1 - Obverse Die Dentil Counts By Overton Variety (Continued)

VAR	1830	1831	1832	1833	1834	1835	1836
ST7	UH	UH	H	UH	H	H	H
101	110	110	110	?	110L	149?	149
102	110	110	110	110	110L	147	149
103	110	110	110	110	110?L	147	148
104	110	110	110	110	144L	147	148
105	110	110	110	110	141L	?	148
106	110	110	110	110	136L	?	148
107	110	110	110	110	136L	148	148
108	110	110	110	110	142L	148	149
109	110	110	110	110	141S	?	149
110	110	110	110	110	141S	146?	149
111	110	110	110	110	148S	148C	148
112	110	110	110	110	149S		149
113	110	110	110	110	142S		148
114	110	110	110	110	142S		148
115	110	110	110	110	149S		148
116	110	109	110	110C	146S		147
117	110	110	110		148S		148
118	110	110	110		149S		149
119	110	110	110		148S		148
120	110	110	110		148S		148
121	110		110		148S		148
122	110		110		149CS		148
123	110		110				148

1817 through 1833

The obverse dies for the Capped Bust Halves dated from 1807 through 1815 ranged from 95 to 154 dentils. Most adjacent years had varying dentil count ranges. Once the dentils were counted and presented in tabular format by year and emission order sequence, it was observed that most of the dentil counts for the overdated obverse dies were either consistent with the range of dentils for a previous year or for the overdated year.

Table 2 - Obverse Die Dentil Counts By Overton Obverse Number

OBV	1820	1821	1822	1823	1824	1825	1826	1827	1828
1	110*	110	109*	109	110*	109	110	110*	110
2	110*	110	110*	109	110*	110	108	110	110
3	110	110	110	109	110	110	110	110	110
4	110	110	109	109	?	?	110	110	110
5	110	110	108	108	110	109	110	110	110
6	110	110	108	109	109	110	110	110	110
7	110		110	108	109	110	110	110	110
8	109		108	109	110	110	110	110	110
9			109	109	110	110	110	110	110
10			109	107	109	110	110	110	110
11			109	110	110	110	110	110	110
12			107		107	110	110?	110	110
13			108		108	110	110	?	110
14			110		109	110		110	
15						110		110	
16								110	
17								110	
18								110	
19								110	
20								110	
21								110	
22								110	
23								110	
24								110	
25								110	
26								110?	
27								110	
28								110	
29								110	

Table 2 - Obverse Die Dentil Counts By Overton Obverse Number (Continued)

OBV	1829	1830	1831	1832	1833	1834	1835	1836
1	110*	110	110	110	?	110L	149?	149
2	110	110	110	110	110	110L	147	148
3	110	110	110	110	110	110?L	?	148
4	110	110	110	110	110	144L	?	148
5	110	110	110	110	110	141L	148	149
6	110	110	110	110	110	136L	148	149
7	110	110	110	110	110	136L	?	148
8	110	110	110	110	110	142L	146?	149
9	110	110	110	110	110	141S	148C	148
10	110	110	109	110	110	148S		148
11	110	110	110	110	110	149S		148
12		110	110	110	110	142S		147
13		110		110	110	142S		148
14		110		110	110C	149S		149
15		110		110		146S		148
16						148S		148
17						149S		148
18						148S		148
19						149CS		

The dentil counts for the 227 obverse dies (315 die marriages) dated from 1817 through 1833 range from 97 to 111. In Part 1 of this study, I speculated that John Reich partially engraved or completed the obverse working dies of 1817/3 Obverse 1 (O101), 1817/4 Obverse 2 (O102), and 1818/7 Obverse 1 (O101 and O103). I also speculated that Robert Scot prepared all of the non-overdated obverse dies of 1817. If the 3 obverse Reich dies are eliminated, the dentil counts for the 224 obverse dies (311 die marriages) would range from 106 to 111.

The breakdown is as follows:

Obverse dentils	# of dies	# of varieties
106	1	2
107	5	6
108	10	12
109	21	23
110	184	261
111	2	2
?	4	5
Total	227	311

All overdated obverse dies from 1820 to 1829 had 110 dentils, except for 1822/1 Obverse 1 (O101), which had 109 dentils (see Table 1). Since the majority of all obverse dies from 1817 to 1833 contained 109 or 110 dentils, it is not possible, based on dentil count, to determine if the overdated dies were prepared from leftover obverse dies.

Robert Scot died in November of 1823, therefore I have concluded that he could not have prepared any of the obverse working dies dated 1824 and later. Examining the dentil counts for the non-overdated obverse dies of 1817 through 1823, one can plainly see that about half have 110 dentils, and the other half are close to 110.

William Kneass became chief engraver in January of 1824 and worked on business strike dies until he had a stroke in August, 1835. When you examine the dentil counts for the obverse dies dated 1824 through the first three dies of 1834, you will notice that 1824 was a shaky year for placing 110 dentils on the obverse die. However, from 1825 through the first three dies of 1834, only 5 obverse dies had a dentil count other than 110. I believe that Kneass prepared the obverse working dies beginning in 1824 and ending no sooner than the first three 1834 dies.

Beginning in 1820, as per the Leaman/Gunnet Emission Order Sequence, some obverse dies were used in years after they were dated. Leaman/Gunnet identified 19 such obverse dies which were used to strike 27 die marriages. For example, 1820 O107 was struck in 1821, 1821 O107 was struck in 1822, 1822 O112 and O113 were struck in 1823, 1823 O112 and O113 were struck in 1824. Rather than overdating dies, the Mint (Chief Engraver?) may have made a conscious decision to use leftover dies "as is". Unfortunately, this does not explain the boldly overdated 1820/19 Obverse 1, 1820/19 Obverse 2, 1824/who knows what Obverse 2, 1829/7 Obverse 1, and the weakly overdated 1822/1 Obverse 1, 1822/1 Obverse 2, and 1824/1 Obverse 1.

From an obverse dentil viewpoint, things were pretty boring for dies dated 1820 to 1833. In 1834, things begin to get exciting . . .

1834

Table 3 is arranged by the Leaman/Gunnet Emission Order Sequence and shows the number of dentils for the 1834, 1835, and 1836 business strike as well as the 1833, 1834, and 1835 Crushed Lettered Edge Capped Bust obverse dies. 47 obverse dies were used to generate 57 die marriages. An “R” after the obverse number indicates that the obverse die was reused.

I have divided the 1834 obverse dies into six categories:

1. large date, hubbed from Master Die 4, with large stars (Obverses 1-3),
2. large date, hubbed from Master Die 4, with medium stars (Obverses 4-8),
3. small date, hubbed from Master Die 4, with medium stars (Obverse 9),
4. small date, hubbed from Master Die 5, with medium stars (Obverses 12-13, and 15),
5. small date, hubbed from Master Die 6, with small stars (Obverses 10-11, 14, and 16-18),
6. small date, hubbed from Master Die 3, with small stars (Obverse 19 - the Crushed Lettered Edge)

After measuring the stars on the business strike 1834 halves, I believe that three different size stars were engraved on the dies. The sizes are noted as small, medium, and large. The difference in size between the small and medium stars is 0.2 millimeter, and the difference between the medium and large stars is also 0.2 millimeter.

If one assumes that the 1834 large date / large stars obverse dies were prepared first (since halves dated 1833 and back have a large date and large stars), Master Die 4 was used prior to Master Die 5, Master Die 5 was used prior to Master Die 6, and the CLE was the last die prepared (since it is believed that the CLEs were struck in 1836), then a theoretical emission order grouping for the 1834 obverse dies would be as follows:

1, 2, 3 / 4, 5, 6, 7, 8 / 9 / 12, 13, 15 / 10, 11, 14, 16, 17, 18 / 19

Since the emission order sequence (with reused obverse dies eliminated) is:

2, 3, 1 / 8, 5, 6, 7, 4 / 15, 13, 12 / 17, 11, 10, 16, 14, 18 / 9 / 19

the only difference between the theoretical grouping and the actual emission order sequence is the use of Obverse 9!

Table 3 - Obverse Die Dentil Counts By Emission Order, 1834-1836

Year	POSITIONS 1-19			POSITIONS 20-38			POSITIONS 39-57				
	Var	OBV	Dentils	Year	Var	OBV	Dentils	Year	Var	OBV	Dentils
1834	102	2	110L	1835	109	7	?	1836	101	1	149
	103	3	110?L		106	4	?		102	1R	149
	101	1	110L		107	5	148		119	15	148
	108	8	142L		101	1	149?		122	17	148
	105	5	142L		102	2	147		114	10	148
	106	6	136L		1834	121	18	148	116	12	147
	107	7	136L		1835	104	2R	147	115	11	148
	104	4	144L		1834	120	18R	148	118	14	149
	116	15	146S		119	18R	148	1834	110	9R	141S
	114	13	142S		1835	103	2R	147	123	18	148
	113	12	142S		1834	109	9	141S	103	2	148
	118	17	149S		1836	109	6	149	104	2R	148
	112	11	149S		110	6R	149	110	9R	141S	
	111	10	148S		108	5	149	117	13	148	
	117	16	148S		1833	116	14C	110	121	16	148
	115	14	149S		1834	122	19C	149S	120	16R	148
1835	105	3	?		1835	111	9C	148	112	8	149
	110	8	146?		1836	106	4	148	113	9	148
	108	6	148		107	4R	148	111	7	148	

In 1834, three obverse master dies were used to hub the business strike dies. Only Obverses 1-3 contained 110 dentils. Why only these three? Since Obverses 1-9 were hubbed from Master Die 4, and Obverses 4-9 range from 136 to 144 dentils, I have concluded that 110 dentils is not specific to obverses hubbed from Master Die 4. Since Obverses 1-8 have large dates, and Obverses 4-8 range from 136 to 144 dentils, I have also concluded that 110 dentils

is not specific to obverses engraved with a large date. I can think of three possible scenarios that explains why 1834 Obverses 1-3 are the only three 1834 obverse dies with 110 dentils:

1. The dentil engraving device broke, and was replaced with one that had a smaller width (to allow more dentils to be engraved on the die). This is plausible if the 1833 CLE obverse is an unused 1833 obverse die, and not one prepared in 1836. I do not believe this to be the case. Note: this topic is discussed in detail later in this article.
2. Someone at the Mint made a decision to increase the obverse die dentil count after the three 1834 large date / large stars obverse dies were completed. It just couldn't be that simple!
3. 1834 Obverses 1-3, and Obverses 4-18 were made by different people.

I believe that the dentils, stars, and digits that were engraved on the dies were signatures of the people who engraved them. I am therefore speculating that 1834 Obverses 1-3 and 1834 Obverses 4-18 were prepared by two different engravers. I believe that Kneass intended to engrave 110 dentils on all obverse dies that he engraved. Since it is known that Kneass engraved 3 new master dies in 1834 (2 obverse and 1 reverse), and prepared at least 3 new hubs, I am speculating that Kneass engraved all master dies and prepared the hubs for 1834, as well as the working dies, dentils, date, and stars for 1834 Obverses 1-3. I am also speculating that Christian Gobrecht engraved the dentils, date, and stars on 1834 Obverses 4-18! Since Gobrecht was a talented engraver, he may have actually hubbed the working dies for 1834 Obverses 4-18 with Kneass' permission, or supervision, however, this may never be proven.

1835

The number of dentils on 1835 obverse dies range from 146 to 149. This is consistent with the range of dentils on 1834 Obverses 4-18. Since I believe that Gobrecht engraved the obverse working dies for 1834 Obverses 4-18, I also believe that he engraved all of the 1835 obverse working dies.

Based on the Leaman/Gunnet Emission Order Sequence, 14 die marriages were struck in 1835 (see Table 3); 11 were dated 1835 and 4 were dated 1834. For argument sake, assume that the same number of half dollars were struck from each die marriage, half dollars for a given date were struck from January 1st through December 31st, and that the same number of half dollars were struck each day. Of course, all 3 are not true. Since Kneass had his stroke on August 28th, let's assume that he put 8 full months of work into half dollar production. This would imply that Kneass either hubbed the dies and supervised Gobrecht's engraving of the obverse working dies (or Kneass supervised Gobrecht's

hubbing and engraving of the obverse working dies) for 8/12ths of the 14 die marriages struck, or the first 9 die marriages of 1835.

If we assume that Kneass was not capable of hubbing and engraving dies after he had his stroke, then something should stand out around the 9th die marriage in the emission order sequence for 1835. Based on the Leaman/Gunnet Emission Order Sequence, the first 8 obverses used in 1835 were all dated 1835 (see Table 3). None of these obverse dies were reused. It is at this point that I believe that Kneass had his stroke. One of two scenarios then possibly occurred:

1. Gobrecht was not permitted to hub dies on his own since he had not been appointed to Chief Engraver or Assistant Engraver. The 1835 production was completed by using 2 unused 1834 obverse dies (Obverses 9 and 18) to create 4 die marriages, and reusing 1835 Obverse 2 twice to create 2 additional die marriages.
2. The Mint ran out of die steel and was unable to produce new dies. Since die steel was probably ordered by Kneass, who was incapacitated due to his stroke, the 1835 production was completed as described above.

Regardless of which scenario actually happened, the engraving of only 8 obverse dies for 1835 is directly attributed to Kneass' stroke. Although the reported 1835 mintage is 5,352,006, the coins were struck from 14 die marriages, not 10.

Since it is clear that something happened to upset the use of obverse dies for the last 6 die marriages of 1835, I wondered if the reverse dies were also affected. I'll let you be the judge:

1835 EO	Reverse Die	First Use	Comments
1834 O121	1834 Rev U	No	This is the 3rd use of this die (which is also 1835 Rev A).
1835 O104	1835 Rev C	No	This is the 2nd use of this die (first use was 1835 O-107).
1834 O120	1834 Rev T	No	Die was first used on 1835 O-104 (which is also 1835 Rev C)
1834 O119	1834 Rev S	Yes	
1835 O103	1835 Rev B	No	Die was first used on 1834 O-119 (which is also 1834 Rev S)
1834 O109	1834 Rev I	Yes	

1836

The number of dentils on 1836 obverse dies range from 147 to 149. Since this is consistent with the range of dentils on 1834 Obverses 4-18 and 1835 Obverses 1-8, I believe that Gobrecht engraved all of the 1836 obverse working dies. Considering that only one business strike die marriage was not dated 1836, it was a rather calm year for half dollar production.

Those @#\$%^&*() Crushed Lettered Edge Half Dollars!

Russ Logan's excellent article on the Crushed Lettered Edge (CLE) Half Dollars provided the physical characteristics and pictures of the three known CLE obverses (1833 Obverse 14, 1834 Obverse 19, and 1835 Obverse 9). The article also documented that the Capped Bust lettered edge business strike halves were struck in an open collar and that the Crushed Lettered Edge halves were struck in a closed collar.

The Leaman/Gunnet Emission Order Sequence specifies that the 1833, 1834, and 1835 CLEs were struck in 1836, just after 1836-108 and just prior to 1836-106 (see Table 3). Russ Logan documented that the dentils on the three CLE obverses are inside a flat wire rim. This is very evident from the pictures in his Journal article, and is not consistent with any business strike lettered edge half dollar dated from 1794 to 1836 (including the proof only 1832 O123). This alone leads me to speculate that the three known CLE obverses were NOT engraved in the year that they were dated, but in 1836 (and probably by Gobrecht). Why would the Mint engrave:

1. 1833 business strike half obverse dies in 1833 (and use them),
2. the 1833 CLE obverse in 1833 (and not use it until 1836),
3. 1834 business strike half obverse dies in 1834 (and use them),
4. the 1834 CLE obverse in 1834 (and not use it until 1836),
5. 1835 business strike half obverse dies in 1835 (and use them),
6. the 1835 CLE obverse in 1835 (and not use it until 1836)?

If the 3 CLE obverse dies existed prior to the end of the 1835 production year, they should have been used to produce business strikes after Kneass had his stroke in August 1835. It just does not make sense!!! What does make sense is that the three CLE obverse dies were prepared specifically for use in the closed collar, and that they were engraved just prior to their use.

Conclusion

Die preparation was not an exact science. The engravers probably put their best efforts into creating the master dies, hubs, and working dies. Some may even call this art. Reich, Scot, Kneass, and Gobrecht have left their signatures on the dies that they prepared, and the resultant coins that we now study. They each had unique qualities and deficiencies that resulted in similar, but distinctly different obverses.

I know that I have only touched the surface by focusing primarily on the dentils, and expanding when necessary to the other devices that were on the die. Had I waited until my research was complete on every aspect of the obverses and reverses of all Bust Half Dollar die marriages from 1794 to 1836, you would be reading these articles in the 21st century. I do not expect that all of my speculations are correct. If anyone has additional evidence to prove or disprove my speculations, I encourage them to publish their information.

I cannot wait to find out what the reverse dentil counts will tell us.

To be continued...

43147 Hadley Court
Canton, MI 48188



BUST DOLLAR COLLECTORS

Russ Logan has informed us that it is time to send in your updates for the Bust Dollar Master Census. Everyone is encouraged to send in their census. Your identity will be kept secret by using your **JRCS** membership number as the heading for your collection. Your personal census will be kept confidential and not used for any other reason. This, and other censuses compiled by the **JRCS** for its members, is a valuable tool for determining rarity and condition census for varieties. Please forward your census, or questions, to the editors at:

P.O. Box 135, Harrison, Ohio 45030.

Safety Factor in Grading Under Halogen Lamps?

Edgar E. Souders

Despite the fact that the Co-Editors of the Journal have forced me to produce concise wordsmithing that is absolutely unheard of for this writer, I would nevertheless like to deviate from my normal writings and discuss something I feel is very important. Something that should be considered during your pursuit for precision grading of our beloved Capped Bust Half Dollars.

Some numismatists are starting to question the benefits of using quartz halogen lamps to grade their Bust Halves. (OK, I can hear certain individuals starting to disagree with me on this subject, but please put up with my grumblings and review my findings that follow.)

While there is no question that quartz halogen lamps do provide an excellent white light source for grading, there is a fear that the bulbs generate damaging levels of ultraviolet radiation (UV). Particularly, if one is grading under the lamp for extended periods of time. Is someone crying wolf here, or is this fear justified?

Well, one lamp manufacturer (who has denied any potential problem), suggests, for those who question, that a glass cover should be placed in front of the lamp which would completely shield out all UV radiation. This statement, in itself, should tell you something.

For the record, Australia's National Health and Medical Research Council has stated that desk lamps using tungsten halogen lamps were found to emit potentially hazardous levels of UV radiation. Furthermore, they advised the manufacturers to fit glass filters over the lamps.

Their report stated that exposure to unfiltered bulbs could cause eye cataracts, sunburn or skin cancer without the evidence of sunburn. Exposure becomes hazardous after nine to 12 minutes to a 50 watt bulb, and 45 minutes with a 20 watt bulb.

The use of a retro-fitted filter would have to be attached in such a way as to exclude any unfiltered light falling onto the hands, face, or eyes. Additionally, the high heat generated by these lamps might make the addition of a filter somewhat difficult.

Now I am not sure about you, but in the last few years my once excellent, noncorrected, close-up eyesight has - how should I say - "Gone straight down the toilet." Age, I am sure,

(continues on page 26)

Revision of Rarity Ratings for Bust Half Dollars

Glenn R. Peterson, M.D.

In April 1987, the Bust Half Nut Club was concerned about inaccuracies in the rarity ratings for Bust Half Dollars that were listed in Al Overton's second edition, **Early Half Dollar Die Varieties 1794 to 1836**. The Bust Half Nut Club then published a list of rarity ratings for bust halves that superseded Overton's second edition. Since that period of time, Don Parsley published the third edition of Overton's book. In the third edition, there were a number of revisions to the rarity ratings. Don had a considerable amount of input, but not that of the entire Bust Half Nut Club. We were left with a number of discrepancies between the two rarity rating lists. There was also a philosophical change taking place. The BHNC made a planned decision in 1987 not to include any R8s (1-3 in existence) in their listing.

The thought was that coins would eventually show up, dropping them below R8 status. Accordingly, the BHNC had R7 as the rarest designation of the Bust Half Dollars. Parsley, in his third edition of the Overton, broke with this tradition by designating R8 status to the 1823 O113 coin. This designation of R8 status was a bit unfortunate, because since then, an additional coin has surfaced. That development notwithstanding, there are a number of other die marriages of Bust Half Dollars that still do not exceed two in number.

In 1993 a poll was taken of the BHNC membership regarding the changes made by Parsley and the R8 status issue. The results of the poll were that four coins were ascribed the honor of the R8 status.

Three new coins appeared in the poll of the BHNC. They were the crushed letter edge varieties of 1833, 1834 and 1835. They have recently been added to the list of collectible coins by the BHNC. The rarity ratings for these coins were established through this poll.

When all was said and done, 37 coins were presented to the BHNC membership for revision of rarity ratings. Of those, only eight coins were ascribed a new rarity rating that did not match the one used by Parsley. It is this author's impression that this is a tribute to the accuracy of his work. The results of the rarity rating survey are as follows (Please note that the asterisks denote those coins with new ratings):

REVISION OF RARITY RATINGS FOR BUST HALF DOLLARS

		Old BHNC Rating	Parsley Ed. Rating	New Rating
1809	O106	2	3	3
1809	O107	2	3, a-4	3
1809	O109	1	4, a-2 b-4	2
1811	O103	4	4, a-3	4*
1812	O108	2	1, a-2	2*
1814	O104	5	4, a-1	2*
1817	O104	7	6, a-6	6
1817	O105	3	4, a-4	4
1818	O102	2	1, a-2	2*
1818	O114	2	3, a-3	3
1822	O106	1	3, a-4	3
1822	O108	2	3, a-3	3
1823	O113	7	8	7*
1825	O103	3	4	4
1825	O110	3	2	2
1825	O118	7	7	8*
1827	O126	3	2	2
1827	O131	1	2	2
1827	O132	4	3	3
1827	O136	4	3	4*
1827	O149	7	7	8*
1828	O102	1	2	2
1828	O106	3	4	4
1828	O108	2	3	3
1829	O106	4	5	5
1829	O120	7	7	8*
1830	O104	2	3	3
1830	O107	1	2, a-2	2
1830	O118	2	3	3
1833	O102	2	1	1
1833	O116	Crushed Letter Edge		7*
1834	O103	1	2	2
1834	O122	Crushed Letter Edge		7*
1835	O111	Crushed Letter Edge		8*
1836	O108	2	1	1
1836	O114	3	2	2
1836	O118	3	4	4



Capped Bust Eagles: A New Approach to Die Variety Nomenclature

David Kenny

The history of United States coinage includes several denominations of short duration. Two-cent pieces, twenty-cent pieces, stellas and SBA dollars are among the oddities. Capped Bust Eagles, while certainly among the briefest of series, was not an oddity. In fact, it was the proud basic unit upon which the entire Federal gold currency was based. The usual reasons given for its early discontinuance are three-fold. First, the export of U.S. gold coins, a .917 fine gold product, to parts of Europe and South America where coins as low as .875 fine were being minted. Second, the higher popularity of the half-eagle which was closer in weight to the British guinea, French Louis and Brazilian 4000 Reis. Third, because the monetary value of the eagles was purchasable at a silver to gold ratio of 15:1, when gold tended to a market value of 16:1. A profit could be made by buying eagles, melting them, and then selling the gold for silver, ad infinitum. This last argument for the cessation of mintage of early .917 fine eagles is discussed by Messers. Eckfeldt and DuBois on page 143 of their eminently readable book **A Manual of Gold and Silver Coins of All Nations Struck Within the Past Century** that was published in 1842. They further state, with the authority of first hand knowledge, that gold coins of the "earlier standard" were recoined after the Act of 1834 when the gold to silver ratio was formally increased to 16:1 and the alloy changed to .900 fine (1839).

This author would question the first two reasons based on the following. Both British and Brazilian coinage were produced from .917 fine gold, and many European principalities minted coins of .986 fine gold. Additionally, the 4 Escudo and 6400 Reis coins, which were close to eight dollars in value, and the 8 Escudo coins were vastly more abundant than the 4000 Reis and more highly favored over British guineas (coin of the oppressor). Furthermore, the French had debased the Louis in 1792, and switched to the smaller 20 Franc coin in 1803. All in all, it may be likely that good old Yankee larceny led to the early demise of the eagle. The 15:1 ratio of eagles to silver probably prompted the debt ridden citizens of the early republic to survive by whatever ingenuity they could devise, even the small 6% profit potential. The eagle's resurrection in 1838 from recoined earlier pieces may explain the further scarcity of this early issue today. At any rate, President Jefferson halted production of both Eagles and Dollars in 1804, yielding barely ten years of production.

In addition to its low mintage, few years of production, and the factors which led to its attrition, Capped Bust Eagles were produced from relatively few dies. Capped Bust Half Dollars come in approximately 450 varieties. Even Draped Bust Dollars, production of which was also curtailed in 1804, can be found in over 120 varieties. The early eagles were produced from a total of 19 known obverse dies and 20 known reverse dies.

Furthermore, these die varieties are no shrinking violets. Nine of the 19 obverses are instantly identifiable without reference to seeing the date. Likewise, 11 of the reverses can be recognized with ease, and their obverse predicted with some certainty. Therefore, while a cumbersome nomenclature incorporating year and die combination is necessary for the intelligent sorting of Bust Halves, no such complex mechanism is required for Capped Bust Eagles. Only 32 combinations of obverse and reverse dies have been found.

By contrast, the single year of 1798 yields 33 varieties of Dollars as listed in Doug Winter's article *Bust Dollars: An Update for 1798* in the **JR Journal** Volume 3, Issue 1 (April, 1988). Admittedly, it is convenient for the dealer and auctioneer to use a date to refer to an 1801 B-1-A or an 1800 B-1-A variety. This nomenclature will not reveal that both of these varieties share a common reverse die with the 1799 B-5-G. Convenience aside, it is the proposition of this author that the serious student of early Eagles already thinks of these coins by die rather than by date. It is with this in mind that the following nomenclature is put forth. Both Walter Breen's extensive writings and Robert Hilt's excellent book on varieties have been consulted in this endeavor. Mr. Hilt's die emission charts are the forerunner of the herein described identification system. However, full credit must be given to Sil DeGenova and Stuart Levine of Tangible Assets, Inc. Their suggestions and data have been incorporated, and their encouragement crucial to this project.

The following list is as close to actual die usage sequence as the author can determine without further detailed side by side comparisons of many die state examples (Heads up! More research is necessary). As has been the custom in the past, the variety nomenclature is prefixed with the last two numbers of the date and the authors' initial followed by the obverse die number in sequence from 1 to 19, and then the reverse die indicated by capital letters from A to T. Kindly note that the appearance of one particular die, namely #2 dated 1795, was so completely altered by being repeatedly lapped that Mr. Breen labeled it a separate variety. It was apparently used, lapped, used again, replaced with die #3 and then relapped and used again after #3. Further study may show similar occurrences among the varieties dated 1799 and 1803. K-2 lapped-A is not considered to be a separate variety, but is noted here to avoid further confusion. 95-K2-C is, of course, the famous 9 leaf variety.

Obv Die	Rev Die	Breen #	Hilt #	Notations	Stars
95-K-1	A	1795 B1-A	H-1-A	"Y" touches 11th star	10x5
95-K-2	A	1795 B2-A	H-2-A	"Y" away from 11th star	10x5
K-2 Lapped	A	1795 B4-A	H-2-A	Die state-NOT A VARIETY Stacks, 20 JAN 94 Lot 1987!	10x5
95-K-3	B	1795 B3-B	H-3-C	10th star touches cap	10x5
95-K-2 Lapped	B	1795 B4-B	H-2-C	Large die lump on reverse	10x5
95-K-2 Lapped	C	1795 B4-C	H-2-B	9 leaf reverse	10x5
96-K-4	D	1796 B1-A	H-4-D	11 leaf reverse	8x8
97-K-5	D	1797 B1-A	H-5-D	Same reverse as '96	12x4
97-K-6	E	1797 B2-B	H-6-E	Horizontal 2&8 cross star rev.	10x6
97-K-6	F	1797 B2-C	H-6-F	Diagonal 2&8 cross star reverse	10x6
97-K-6	G	1797 B2-D	H-6-G	7 pale arc star reverse	10x6
98-K-7	G	1798/7 B1-A	H-7-G	Same reverse as 97-6G	9x4
98-K-8	G	1798/7 B2-A	H-8-G	Same reverse as 97-6G	7x6

This constitutes the 32 varieties of Eagles. Note that altered dates of the 1804 have the flat bust of 1801 and small star reverse. The large 13 star reverse is only found on a handful of 1803's and the 1804. The 1804 Proof Eagle, which was minted in the 1830's, is not considered by this author to be of this series as it was not a regular mint issue and it was not produced contemporaneously with the regular issue Capped Bust Eagles.

While information regarding new varieties was actively sought, no new data has been reported. As usual, any comments or additions are welcome. By consulting the above chart, one can see that the first arc large Eagle reverse with seven pales in the shield was used with three obverses, namely 1797 (Obverse 6), 1798/7 9x4 stars (Obverse 7), and 1798/7 6x7 stars (Obverse 8). Also interesting is that the last reverse die of 1799, namely die (N), also saw service through 1800 and into 1801, where it must have quickly broken and caused major damage to the obverse die, since the 16-N variety (B-1801-1A) is exceedingly rare.

Obv Die	Rev Die	Breen #	Notations	Stars
99-K-9	H	1799 ?-A	Not in Breen-cracks star 8&L	Small obv 8X5
99-K-10	H	1799 B1-A	Even spaced wide date	Small obv 8x5
99-K-11	H	1799 B2-A	Date 17-9-9	Small obv 8x5
99-K-12	H	1799 B3-A	Closed date	Small obv 8x5
99-K-12	I	1799 B3-B	Berry below right foot of A	Small obv 8x5
99-K-12	J	1799 B3-C	Berry under center of A	Small obv 8x5
99-K-13	K	1799 B4-D	Irregular date	Small obv 8x5
99-K-13	L	1799 B4-E	Long leaf stem points to rim	Small obv 8x5
99-K-14	M	1799 B5-F	Berry beyond right base of A	Large obv 8x5
99-K-14	N	1799 B5-G	Berry center under right A foot	Large obv 8x5
00-K-15	N	1800 B1-A	Same reverse as previous	Large obv 8x5
01-K-16	N	1801 B1-A	Same reverse as previous	Large obv 8x5
01-K-17	O	1801 B2-B	Spines in cap from clashed die	Large obv 8x5
03-K-18	O	1803 B1-A	Smooth leaf stem points down	Large obv 8x5
03-K-18	P	1803 B1-B	Serrated stem	Large obv 8x5
03-K-18	Q	1803 B1-C	"D" touches wing	Large obv 8x5
03-K-18	P	1803 B1-D	Arrow extends to right side of N	Large obv 8x5
03-K-18	S	1803 B1-E		Large rev 14th star
03-K-18	T	1803 B1-F		Large rev 13 stars
04-K-19	T	1804 B1-A	Contoured Bust	Same as previous

One last comment that can be made regarding the collecting of Capped Bust Eagles by variety is that it is fairly simple and straight forward, if not somewhat expensive. Perhaps someone will propose an 'eagle maniac' club where one only needs seven coins to join. It certainly helps one to really 'focus in' at large coin shows if one is seeking out only early Eagles. Considering David Bowers' analysis of the 1993 Coin World Survey, only 2.5% of collectors have an interest in this series. While it may well be the least popular series to collect, the study of these large gold coins can yield a wealth of knowledge about early mint techniques and problems.

The next article will deal with the correlation of mint delivery records with relative variety rarity. Some divergence from commonly published mintage figures will be proposed and a chart describing major identifying characteristics for easy identification will be presented. Any one with data regarding this endeavor is requested to share it before the author completes his article. Credit will be given. Kindly correspond at the following address:
David Kenny, 11938 Bargate Court, Rockville, MD 20852.

After that it seems only fitting to do the same for Half Eagles 1795-1807 and Quarter Eagles 1796-1807. Who knows, this could lead to a book!

A further note. Frequently evidence is presented regarding proof that the stars on Bust Halves were punched separately from the Liberty device. This has been adequately proven. Often the question of why this was done has been asked. By looking at the early varieties of eagles (or dollars for that matter), it is obvious that the mint was expecting to add a star for each new state as it was admitted. Therefore, the stars would have been planned last and would be expected to change in size when more and more crowded the field. Although the number was standardized by 1798 to be 13 stars, the habit and technique of punching the stars separately must have been carried through the most part of the early 19th century.

[ed. - Early Mint techniques and production methods did not physically allow the stars to be hubbed, as the presses could not sufficiently raise the stars on the periphery of the hub.]



SAFETY FACTOR IN GRADING UNDER HALOGEN LAMPS?

(continued from page 19)

is the primary factor. Still, it seems logical to me to try to protect the eyesight I have left. Sticking my head beneath a halogen lamp for an extended period of time, as a further test, is not exactly my idea of entertainment! Personally, and quite seriously, I know of more than one collector who has been 'sunburned' from these lamps.

Admittedly, in grading, halogen lamps are mostly used for high grade AU and MS halves (hairlines show up much more pronounced, and even the slightest bit of wear seems to jump from the coins surfaces). Still, I have noted an increase in the use of these lamps, by many collectors and dealers, for general grading purposes. The effects of which, in my opinion, have not been studied to any large degree. Think about it.



Another Bust Half Dollar Remarriage

Bradley S. Karoleff, NLG

In Volume 8, Issue 1 (October, 1993) of the **John Reich Journal**, Russ Logan wrote an article proving the existence of a Bust Half Dollar remarriage. This was the first proof of the existence of a remarriage in the half dollar series. Overton, in his **Early Half Dollar Die Varieties 1794-1836** book, alludes to a remarriage in 1818 O105 and O106. Overton's reference to the remarriage used the obverse die as proof where Russ used the reverse die as proof to the remarriage of 1828 O118 after the production of 1829 O110. In the article, Russ challenged us to find another remarriage for the half dollar series, so here is my proof for the second.

My reference coins are the varieties of 1827 O108 and the 1828 O101. These varieties share a common reverse. The other fascinating thing that I realized about these varieties is that the 1827 O108 was struck in 1828! The Leaman/Gunnet emission order for the early part of 1828 is:

1828	O103
1827	O140
1828	O104
1828	O106
1828	O107
1828	O105
1827	O108
1828	O101
1827	O107
1828	O102
1828	O109

Don Parsley lists both an 1827 O108 and O108a in the third edition Overton book. The O108 is listed with a small patch of die dots in the field between I of UNITED and the eagle's left wing from die rust. The O108a is listed with a die lump in the upper part of F of OF and it is noted that most of the rust pits have been lapped away. Parsley then mentions, under the description for the 1828 O101, that the die lump appears on "nearly all specimens", indicating the early die state of this variety to be scarce. He does not list any subvariety of the 1828 O101. There is also no mention of the die rust pits in the field. He does, however, tell us that this is the same reverse "used in 1827" as reverse H. By paying attention, and carefully reading the descriptions, you can pickup the inference that a remarriage is possible.

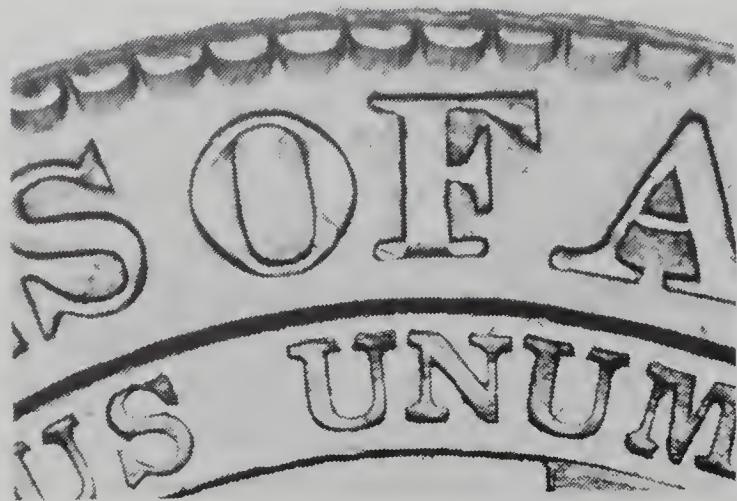


Photo A - 1827 O108. This early product of the reverse die has no filling in the F.

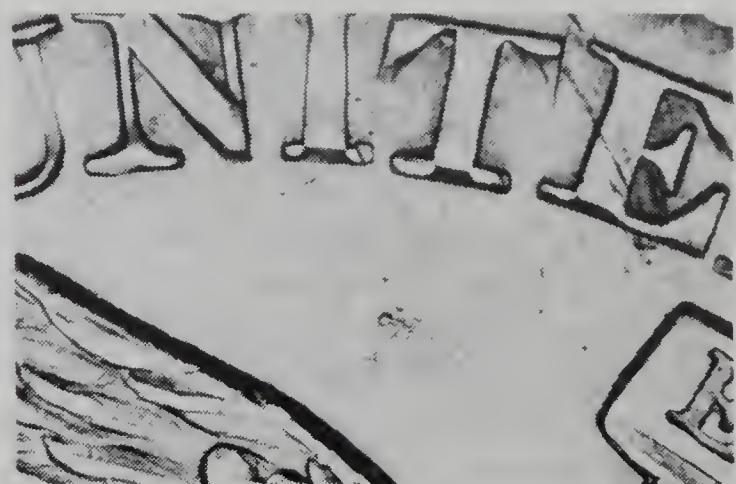


Photo B - Die rust on same 1827 O108. Note the number and severity of the pits appearing just to the left of the wing, and the two small ones under N in UNITED.

My search into this particular reverse's history was prompted by my purchase of a choice VF 1828 O101 just after the publication of Russ' article. I carefully compared my new coin to my existing 1828 O101 and the 1827 O108a that resided in my collection. I then theorized that I needed to find the 1827 O108 to prove a DOUBLE remarriage. This thought has been put on hold as I now need to find an intermediate die state of 1827 O108, or a late die state of the 1828 O101, to prove the remarriage. I can, however, prove that the 1827 O108 is definitely a remarried die combination.

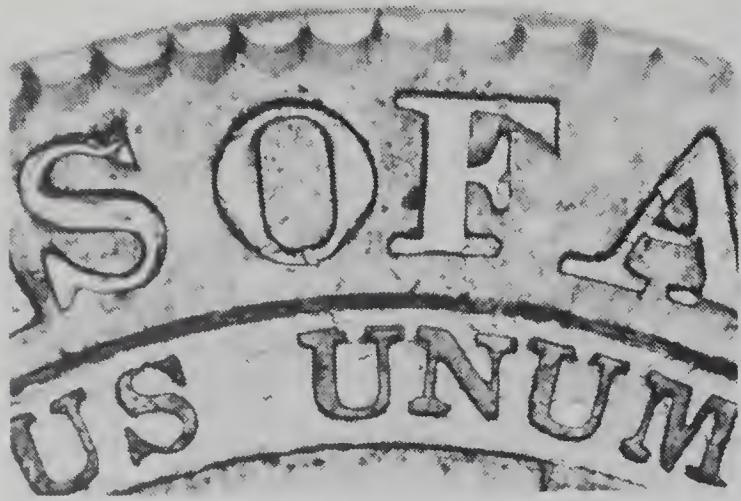


Photo C - 1828 O101. This coin (same reverse as 1827 O108) also has no lump in the F.

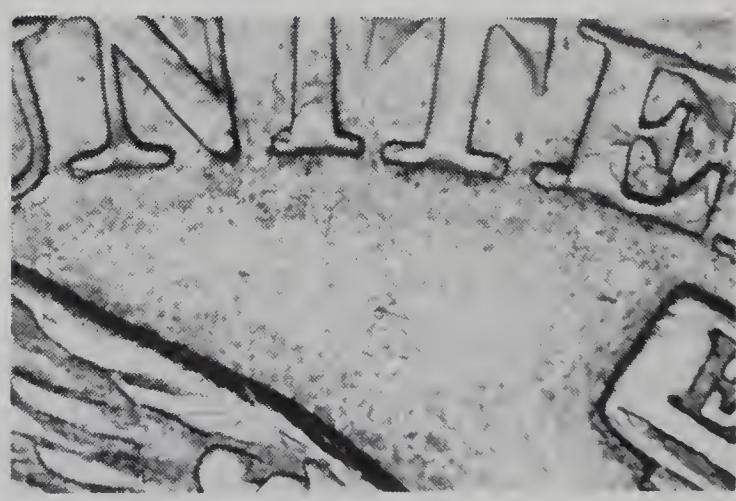


Photo D - Die rust pits on same 1828 O101. Note that the number and severity of the pits are reduced and that the two under the N have disappeared.

Let us start with the assumption that the Leaman/Gunnet emission order is correct for these varieties. This is supported by the evidence provided by the coins. The first two photographs (A and B) are of an 1827 O108 without any die lump. Notice the die rust pits in the field, and especially the couple under the N of UNITED.

The second set of photos (C and D) show an 1828 O101. Notice the reduction in size, and number, of pits in the field, and the elimination of the two under the N. This proves that the 1827 O108 was minted before the 1828 O101, thus proving the emission order. The next photo (E) is of an 1828 O101a with a die lump in the F of OF. Note that the lump does not reach the upright of the inner serif of the F. There is also a 'notch' visible on the upper right side of the lump which makes it resemble a bud on the olive branch. The next photo (F) is of an 1827 O108a with the identical lump in the F. This proves that the 1827 O108 was remarried after the reverse was used to strike at least some of the 1828 O101s. The final photo (G) is of a later state 1827 O108a with an advanced lump in the F. Notice that now the lump touches the upright of the center serif. The question remains, in which marriage does the lump actually appear for the first time? I need a coin with a small lump to prove the center of the sequence. I also could use a very late die state of the 1828 O101a with a huge lump that completely fills the upper part of the F to prove a double remarriage. Can anyone out there help me?

I would like to thank the following people for help in preparing this article. Thanks to David Finkelstein and Tim Osborne for the use of their coins for the photographs, and to Tom Mulvaney for the fine photos for publication. I would also like to thank all the other collectors that inspected their coins to see if they had a die state to help me with the study, without you these exercises would be much more difficult.



Photo E - Die lump appearing on 1828 O101a. Notice that the lump does not touch the upright of the F, and the notch at the upper right hand side of the lump making it look like a bud.

Photo F is of an 1827 O108a half dollar. The reverse shows the word 'UNITED' and the letters 'OF'. A prominent, irregular die lump is visible on the right side of the letter 'F' in 'UNITED', touching the upright of the inner serif.

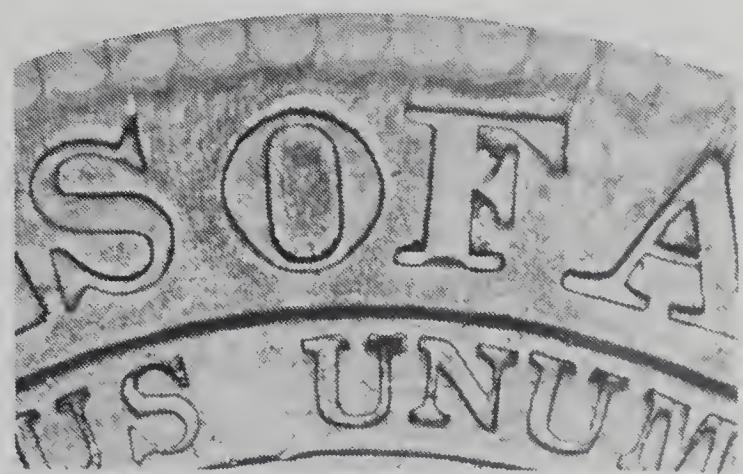


Photo F - Die lump appearing on 1827 O108a. Notice that it is identical to the last photo.

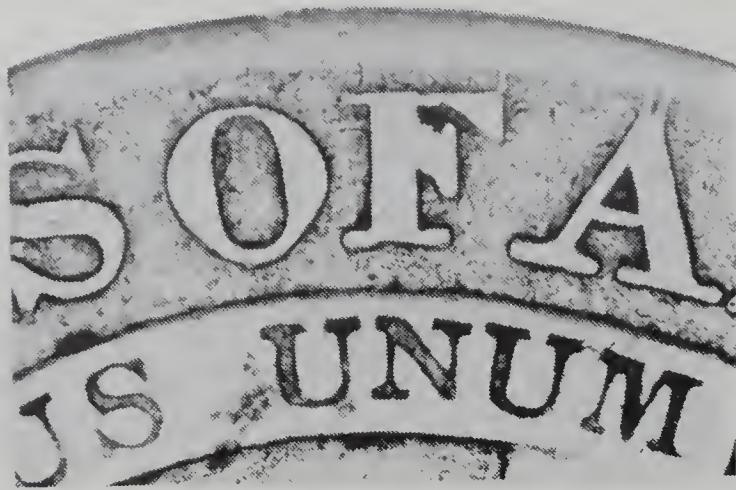


Photo G - Die lump appearing on 1827 O108a.
Notice that the lump now touches the upright of the F and that the notch is now almost gone.

Detailed emission order of the varieties:

1827 O108 No lump heavy rust pits

1828 O101 No lump moderate rust pits

1828 O101 Lump in F minimal rust pits

1827 O108a Lump in F minimal rust pits

1827 O108a Lump in F touching the upright minimal rust pits

Remember: A double remarriage can be proven if we can find an 1827 O108 with the beginning of a lump in the F, or if we can find an 1828 O101 with a huge lump in the F.

You can contact me at the JRCS P.O. Box if you have any information that will help to complete the sequence.



PLAUDITS, PANS AND PERPLEXING POINTS

(PPP continued from page 5)



I am doing research on early Bust Quarters and am requesting information on a specific 1805 Bust Quarter that was sold by Bowers and Ruddy Galleries, out of their Johnson and Meyer Auction, February 9-11, 1978. The auction lot description was as follows:

574 1805 Extremely Fine and most unusual because it was *double struck* at the very top of the obverse and bottom of the reverse. Fragments of the word AMERICA appear twice. Pleasantly toned a medium gray. Scarce as a date in this grade and very unusual as an oddity.

Please contact me with any information about this coin at the following address:
Karl Moulton, P.O. Box 148, Coulin, Idaho 83821.

(PPP continues on page 40)

Center Dots?

Dick Kurtz

It was a fairly slow time at a local coin show, so I had lots of time to search through dealer's stocks of bust halves, noting Overton numbers on the 2 x 2 holders as I went along. One dealer who had sold me a number of attributed halves in the past had a pleasing EF 1832 that was not marked. After a couple of runs though Parsley's Third Edition, there still was not a number assigned, and my frustration level was mounting. By all rights, it should have been O111, but the "two dots 1 mm apart between crossbars 4 and 5" just were not there. Since the O111 in my collection was only a Fine 12, I bought the coin anyway, since it would be a nice upgrade if it proved to be O111.

A trip to the safe deposit box with the Overton book, a good magnifier, and a chance to compare my O111 with the new coin proved that it, too, was O111 - dots or no dots. But what were the ramifications of this discovery? Reverse I of 1832 O111 is shared by 1832 O112 and the rare 1833 O115 (Reverse N). When looking at 1833's in decent condition, that is the one clue that I use in the hope of cherrying the elusive O115. Had I passed up one or more O115's by examining them in too cursory a fashion? If the 1833 O115 had been struck both prior to, and after, 1832 O111 (not unheard of in some bust series), that was a distinct possibility. The thought was unsettling. A quick look at my 1832 O112 revealed that the dots were there and plain to see. What is the emission order?

A quick trip home to review Leaman and Gunnet's edge die work, outlined in the ANS book, **America's Silver Coinage 1794-1891** (summarizing the 1986 Coinage of the Americas Conference) put my mind to rest. Their work indicates (I hesitate to say, 'proves') that the emission sequence was 1832 O111, 1833 O115, and finally 1832 O112. Since 1832 O111 is commonly found with the two dots on the reverse, we can assume that my coin is an early die state of this marriage, and that 1833 O115's are not likely to be found without the dots.

What does that say about the origin of these two dots? Apparently they are not center dots placed on the die to aid in location of all the features on the reverse. I speculate that something was accidentally dropped on this reverse die when it was out of the press, putting two small dents in what was a raised portion of the die.

If we keep finding things like this, collectors of bust coinage will know more and more about less and less until we know almost everything about almost nothing. Maybe that is what makes it fun!



A Lucky Day in Long Beach

Ed Price

In Volume 7, Issue 3 (April, 1993) of the **John Reich Journal**, I reported my discovery of a new variety of 1803 Draped Bust Dime, designated as JR5. In that article, I described the coin and provided some observations on possible emission sequence. Now I would like to describe some of the luck and emotion associated with that discovery.

The day was Thursday, February 4th. I was attending my first Long Beach show. The bourse was very large and reminded me of the ANA shows I have attended. After entering the bourse area, I used the floorplan to locate the few dealers I know fairly well. I wandered around for a while and then went to one of those dealers. He knows my collecting interests and said that he had acquired a nice 1803 dime which he would have in about an hour. I agreed to stop back later.

I continued wandering and stopped to talk to Julian Leidman. I showed him a beautiful MS-60+ 1800 JR2 dime from Jim Matthews' collection that I had purchased at the Superior auction a few days earlier. Julian is hard to impress, but he said nice words and I enjoyed looking at the remarkable coins he always has in his case. I had seen Larry Briggs when I came in and I stopped at his table to see a 1798 dime that he had suggested I look at - a nice coin, but not for me. I chatted with Jim McGuigan, wandered some more and returned to the dealer with the 1803 dime.

The coin was a lightly cleaned EF-45 JR4. It appealed to me and was an earlier die state than the one in my collection. After about 20 minutes of careful examination and discussion, I agreed to buy the coin and wrote a check. This was a good transaction. I felt I paid a fair price and the dealer was also satisfied. Now I was ready to walk the bourse floor more systematically.

As I was packing up my books and notes, the dealer mentioned that he also had two other lower grade 1803 dimes on consignment from another dealer. He had apparently just gotten the coins and had not had time to study them closely. He said that neither one was the rare variety, meaning JR1, which is the only R7 Draped Bust Dime. The first of the two he showed me was a very low grade JR3, which is the most common variety of the 1803s. I pushed it aside.

The second 1803 dime included a 1971 Stack's auction flip and was a cleaned F-VF with some dark areas. The coin was presentable, but not choice. It clearly had the same obverse

as the JR4 dime I had just studied carefully and purchased. I turned the coin over. My heart skipped a little beat. The coin I had just purchased, and my other JR4, were both struck from a shattered reverse die. This reverse was not shattered. My first thought, and the words which I spoke were, "This is an earlier die state." My second thought was that an unshattered reverse for this 1803 dime was not possible since the reverse die had shattered much earlier when used with an 1802 obverse. Fortunately, I did not say that. Then my heart skipped a big beat. The reverse was the JR1 reverse, characterized by star 7 and star 12 being very close to each other. This was a new die marriage and therefore a new variety!!! I quickly completed this transaction, also at a price which satisfied the dealer.

I was both excited and dazed. I had in my pocket the only 1803 JR5 anywhere (at least until someone found another). I wandered the bourse floor for about an hour. I accidentally encountered the dealer who had consigned the new variety still in my pocket. He had purchased a collection which included a number of early dimes. I bought a 1798 JR4 dime from him. The coin is a nice F-15, and is an earlier die state than others I have. Remarkably, the 1798 dime also had a Stack's flip with it from the same 1971 auction. Noting my interest in early dimes, the dealer said he had two others out on consignment that he could get back if I was interested. I said I had seen them and had already bought one of them. I then went back to my hotel room.

I checked the new coin against 'The Book', **Early United States Dimes 1796-1837**, and confirmed that it was a new variety. A little later my wife returned to the hotel room to find me with my books spread out in a state of eager anticipation. Would an inexperienced coin observer see the variety as clearly as I had? I said to her, "now we are really in the big time." She looked a little startled. A few days earlier she had been with me when I bought the fairly high priced 1800 JR2 dime at the Superior auction. It must have sounded as though I had done something very expensive. I showed her the varieties in the book and the new coin. She lit up. "This isn't even subtle," she exclaimed, having seen me excited in the past over apparently trivial differences in die states. The coin had passed the first critic.

I called Bill Subjack, finally reaching him at 8:00 am Saturday morning (5:00 am in Long Beach). Bill immediately realized that neither die was difficult to recognize and that a new early dime variety had finally been found - almost nine years after the dime book was published. Bill was also excited and made me promise not to leave the coin unattended in my hotel room. I arranged for him to see the coin the following Thursday. Jules Reiver saw it a few days after that and also confirmed it as a new variety.

I am sure that other new varieties are still out there to be found. Just keep looking!



Attributing the Smithsonian Collection

Glenn R. Peterson, M.D.

Thanks to Mrs. Stefanelli and Mr. Richard Doty, Kent Ingram and I were given the opportunity to view the Smithsonian institution National Numismatic collection bust coinage. We made two visits, lasting 4 hours each, in June of 1992 and November of 1993. During this time, we were able to attribute all the Bust Half Dollars, most of the Bust Half Dimes, Dimes, and Quarters. In this article we are reporting on the bust half dollar collection.

A few words about the Smithsonian Collection. I used to believe that the mint saved one coin each year in mint state for the museum. I formed this erroneous conclusion when I visited the Smithsonian Institution as a teenager in the early 1960's. At that time they had a revolving case with trays of coins - one per year. The unique 1849 Double Eagle was the coin that most impressed me at that time. This case with revolving trays has been long-since retired, as kids (not me) tried to tamper with the mechanism to spill the coins therein. This also risked burning up the mechanism and possibly damaging the coins. As a result, the coins were retired to the vaults. The mint did give some coins to the Smithsonian, but most of the specimens were donated by various collectors. Some of the donated coins were impaired either by exposure to fire or caustic substances and some were coated by a material that did not protect, but rather damaged the coins. Some are beautiful, high-grade proof coins and some are barely in good condition.

Highlights of the Bust Half collection include the three proof crushed letter edge coins dated 1833, 1834 and 1835. These coins were struck as presentation pieces, using the lettered-edge technique appropriate to the date. However, they were struck in a closed collar instead of the traditional open collar. The result is a beautiful raised rim and nearly obliterated letters on the edges. When the large trays were brought out with the coins from these years, the CLE coins were astonishing in their brilliance and sharp detail. They were surely the highlight of the trip.

Other highlights include a proof 1832 O123, a proof 1821 O107, a proof 1822 O103 and circulated examples of 1796 and 1797. The proof 1832 O123 is a high R7 coin and is distinctly different in strike from one of a prominent eastern collector who has another of the approximately four known examples of this die marriage. The Smithsonian piece has residuals of grease around the wing tips and eagles head and weakness in the claws, olive stem, upper part of 50C, TAT and URI of PLURIBUS. Was this coin the first struck with grease left in the die, while other issues had little or none?

The edge lettering is as follows:

FFIIFFTTYY /// CCEENNTTSS /// OORRAALLFF /// AA DDOOLLLAARR.

Mark Smith joined us in the second visit to the Smithsonian and looked at Bust Half Dimes as we viewed their larger cousins. The half dimes had been previously viewed by John McCloskey, but Mark attributed some of the coins with nearly flat reverses not attempted by John. I imagine that you will read more about the Bust Half Dimes in their up and coming Bust Half Dime book.

The collection contains 172 coins, including one R8, three R7 and eight R5 coins. The coins are as follows:

1794	101	(VF)	101	(F)		
1795	103 R5	(F)	126	(VF)	128 R5	(VG)
1796	101 R5	(VG)				
1797	101 R5	(F)				
1801	102	(EF)				
1802	101	(VF)	101	(VF) bent		
1803	102	(F)	103	(EF)	103	(VF)
	103	(F)				
1805	103 R5	(VF)	103a R5	(VF)	107	(VF)
	107	(VG)	107	(VG)	108	(VF)
	108	(VF)	111	(VF)		
1806	109	(VF)	116	(AU55)	116	(Fl2)
	116	(VG)	121	(AU50)		
1807	112	(AU50)	113	(EF40)	114	(Fl2) Scratch
1808	101	(AU50)	101	(EF40)	101	(VF)
	102	(AU55)	103	(AU50)	104	(EF)
	106	(Fl5)	107	(Fl5)		

1809	102	(MS62)	106	(AU55)	109b	(AU50)
1810	101	(AU55)	101	(EF40)	103	(VF)
	104	(VF)	105	(VF)		
1811	103	(MS61)	110	(AU50)	110	(VG)
1812	102	(VF)	105	(EF40)	108	(EF40)
	108	(Fl5)	109	(VF)		
1813	101	(EF)	106	(EF40)	106	(EF)
	107	(AU50) 5% off center				
1814	103	(AU50)	104	(AU50)		
1815	101	(AU55)				
1817	101	(VF30)	109	(MS60)	111	(VF30)
	112	(VF30)				
1818	101	(EF40)	101	(Fl2)	101a	(EF45)
	107	(VF30)	112	(PR60)	114	(EF40)
1819	102	(Fl2)	104	(EF40)	105	(AU55)
	113	(EF40)				
1820	102	(VF)	103	(AU)		
1821	106	(EF)	106	(VG)	107	(PR60)
1822	102	(EF)	103 R5++	(PR61)	104	(VF)
	105	(AU)	105	(VG)	109	(VF)
1823	102	(VF)	111	(AU)	111	(EF)
	* Two copper pieces appear to be bogus to this examiner.					
1824	103	(VG)	106	(AU)	107	(EF)
	107	(G)	108	(VG)	115	(EF)
1825	106a	(AU)	107	(VF)	108	(VF)
	113	(Proof)				

 ATTRIBUTING THE SMITHSONIAN COLLECTION

1826	101	(Proof)	101	(VF)	107	(VF)
	111	(holed)	115	(EF)	118	(AU)
1827	104	(VF)	115	(AU)	119	(VF)
	120	(VG)	121	(AU)	125	(AU)
	131	(EF)				
1828	101	(AU)	107	(EF)	112	(AU)
	114	(EF)	117	(F)	121	(VF)
1829	102	(VF)	115	(AU)	117	(AU)
	118	(VG)				
1830	110	(EF)	111	(PR60)	115	(EF)
	122	(EF)	123	(AU)		
1831	101	(EF-AU)	101	(VF)	103	(PR63)
	103	(EF)	110	(VF)	111	(VF)
	117	(VF)	118	(VF)		
1832	101	(EF)	101	(EF)	102	(VF)
	103	(AU)	108	(VF)	110	(VG)
	111	(VG)	111	(VG)		
	112	(VF) "Houck's Panacea"			123 R7	(PR60)
1833	102	(VF)	104	(EF45)	106	(VF)
	107	(Fl5)	110a	(VF)		
	116 R7	Crushed Letter Edge (PR62) - Accession # 1985.0441.0252				
1834	101	(EF40)	103	(EF45)	103	(Fl2)
	104	(EF45)	104	(VF30)	108	(VF)
	114	(VF)	116	(AU50)	117	(VG10) holed
	119	(EF45)	119	(EF40)		
	122 R7	Crushed Letter Edge (PR59) - Accession # 1985.0441.0261				
1835	102	(VF)	105	(VF)	107	(VF)
	110	(VG)				
	111 R8	Crushed Letter Edge (PR55) - Accession # 1985.0441.0268				
1836	102	(VF)	104	(AU53)		
	107	(PR61) not CLE - Accession # 1985.0441.0277				
	111	(VF)				



Is It Reach As In Peach . . . Or Is It Rike As In Pike? George Hamilton

Maybe the John Reich Collector Society does not have a problem. Maybe people know how to pronounce the name, Reich. Maybe an airing of the situation will be productive of substantial findings, and thus be of help to some of us bewildered souls out here. Right now, I am inclined to go with Rike (as in pike).

A very strong case was made for the 'pike' pronunciation by an educated and eloquent airport bus driver in Orlando, Florida. Last summer, following ANA's 101st Summer conference, I boarded a mini van at the Peabody Hotel early on Sunday morning. The mini van is used for airport/hotel transportation. There was only one other passenger. Those mini vans, with only two passengers and a driver, are conducive to exchanges of friendliness and conversation. I did not know him at the time, but it turned out that the other passenger was the renowned Robert W. Julian.

Mr. Julian has produced quite a lot of literature on Early American Silver, and it was easy for me to engage him in talk about my favorite collection, which is Bust Half Dollars.

Naturally, the Reich name was uttered, and that brought out the best in the driver. He announced that, like John Reich, he was also German. And there was no doubt from the driver's suggestions that he was well versed in 'Germanesee.' He immediately announced that the name is, definitely, pronounced as Rike.

Can we settle on this as gospel, or will this open up a can of worms? I would like to know the correct pronunciation once and for all . . . if it is possible to do so.

By the way, Mr. Julian did not disagree. He tends to be on the modest side. I say that because he did not tell us that, on the previous evening at the annual ANA banquet, he had been awarded the prestigious Clemy Award, the highest award of the Numismatic Literary Guild. It was awarded for his extraordinary service in numismatic writings.

Rike or Reach notwithstanding, the bus ride will be remembered as the occasion on which this correspondent met the man who has contributed a goodly number of interesting, and informative, articles on the John Reich contributions to Early American Coinage.



Bust Quarters - 1796 - 1838

Jules Reiver

Of the five denominations of silver coins in the bust series, the shortest is the quarter. Struck from 1796 through 1838, only 6,624,029 quarters were made. To date, we know of only 95 varieties.

Of these varieties, the only two controversial pieces are the 1827s. There were supposed to be 4000 struck, but it is now thought that most, or all of them, carried the date 1825. The second 1827 variety is the restrike, made at a later date, probably struck to satisfy collectors who could not find examples of the date. All 1827s are rare and expensive. Most of the quarter variety collectors feel that the 1827s are not part of the series, and would be happy to have examples of the other 93 varieties in their collections.

When Browning wrote his excellent book in 1925 listing the quarter varieties, there were only 88 varieties, including the two 1827s. My goal was to complete the set minus the two 1827s. Along the way I found a new variety of 1820, having the obverse of B4 and the reverse of B2. At the time of the Herbert M. Bergen Sale (by Abner Kreisberg in October of 1979), I had all of the 87 varieties, including the now 1820 B5 . . . but not the 1827s.

Incidentally, Mr. Bergen, Past President of the ANA, had this to say about the 1827 quarters: "It was a long and sometimes discouraging search before I was able to complete my collection of all the varieties listed by Browning, excepting the two 1827 quarters which I could have acquired, but did not do so because their extreme rarity made their cost higher than I could afford to bear, even in the early years of my search." I was not aware of his comments at the time I was building my collection, but I felt exactly the same way about them, and still do.

There were four new varieties listed in the Bergen Sale. I had the new 1820, so I bid on the new 1805, 1806 and 1835 listed in the catalog. The bids on the 1806 and 1835 were successful, but not the one on the 1805. The dealer who outbid me for the 1805 would not sell it to me, so I decided to find one at the forthcoming ANA Convention in Boston. Very methodically, I walked the floor and asked each dealer to show me his 1805 quarters. At the 200th dealer, more or less, one turned up.

The 'new' 1806 and 1835 in the Bergen Sale turned out to be regular varieties. Two other 1806s listed as B6s were really a new variety. I called it B10. Walter Breen told me later that he had reported it in 1954. After that time, four more varieties have turned up.

They are: 1821 B6, discovered by Aram H. Haroutunian; 1831 B7 and 1837 B5, reported by Walter Breen; and 1836 B5 discovered by Bob Spangler. My goal was now 93 varieties. Constant hunting for them was interesting work and enjoyable. Sometimes it was just plain luck, like the time a dealer offered one of them as an unattributed coin. I had just purchased some other coins from him and he only had one the one quarter. Another time it was from a dealer who had done his homework correctly, and had a very high price on the coin. One time it was a good friend who found the coin, knew that I wanted it, and let me have it on a trade. So again my Bust Quarters are complete (except for the 1827s).

[ed. - Congratulations Jules. It is our hope that everyone can have as much good luck and fun with their collections as you have had with yours.]

PLAUDITS, PANS AND PERPLEXING POINTS

(PPP continued from page 30)



I am constantly impressed by the interesting things that JRCS members seem to be able to come up with. Ed Price's research on the 1796 no stars Quarter Eagles appeared, to my untutored eye, to be meticulous, and his conclusions very sound. Harry Salyard's article on the influence of plastic on a coin would have been hilarious, if not so sadly true. We are going to have to reformulate Gresham's Law to apply to encapsulated coins, aren't we? David Davis' piece on numismatic books reminded me of a question I would like members to comment on . . . Just who do you people consider to be the best of the current book dealers - or at least, which ones have any of you had pleasant or unpleasant experiences with? John McCloskey did his usual fine job of adding to the existing pool of numismatic info with his Quarter Eagle article. I believe that two Quarter Eagle articles in one issue is a first !? Russ Logan's census certainly has much to 'chew on' for us half enthusiasts, but I must say that it was a struggle to get the format fully figured out. I finally managed, and thought I may be a tad slow - and then heard the same complaint from two other **JRJ** readers. What can be said about an Edgar Souders article that has not been said many times before. Just great . . . and bring on that book!! Brian Wasserman's piece did a fine job of establishing just what may be our most common DM - and I bet he had a good time doing it.

Philip J. Evans

New Variety of Reeded Half - 1838 JR22

Jules Reiver

New discovery number 7 - February 8, 1994

Discovered in a mixed lot of coins by Jules Reiver with the help of John Darmanin.

Obverse

The obverse of JR2 and JR3, with this new variety being the first use of the die. Top loop of 2nd 8 doubled lower left. Star 11 slightly doubled.

Reverse

Small heavy break down to left from bottom of O1. Heavy lumps down from rim to right side of A3. Dull line in field between T1 and top of beak. There is a heavy lump between this line and the bottoms of D1 - S1. Sharp line in dentils over T1. Sharp line in shield is visible from bottom of stripe 2 to top of stripe 5.

Obverse cracks

From point of bust to rim below star 1.

Reverse cracks

Sharp crack through tops of UNI.

There are still some of my **Variety Identification Manual for United States Reeded Edge Half Dollars 1836-1839 (VIM)** available. For \$10, I'll mail a copy including the pages for the 7 new varieties. If someone just needs the additions, a check for \$1.50 would cover reproducing them and for the postage.

You can obtain either of these by including a check along with your request to:
Jules Reiver, 1802 Forrest Road, Wilmington, DE 19810.



